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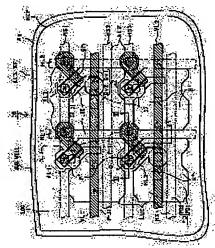
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## (54) MANUFACTURE OF MULTILAYER INTERCONNECTION MATERIAL

(57)Abstract:

PURPOSE: To enhance the step coverage of a conductive film by a method wherein a liquid metal complex is coated on an insulating film, a metal is precipitated in a prescribed region, the conductive film is formed and the liquid metal complex in a region where the metal is not precipitated is removed so that the liquid metal complex is coated faithfully along a stepped shape in a base by means of fluidity of the liquid metal complex.

CONSTITUTION: A liquid metal complex MCP in which a silver halogenide such as AgI or the like is suspended in the form of fine crystals singly or as a mixture is coated on the surface of an interlayer insulating film IC. While a device is placed on a rotary table and is rotated, the complex MCP is dropped in the central part of rotation and is coated while the complex is stretched toward the circumference by a centrifugal force. The coated complex MCP is dried; the liquid metal complex MCP in an optical black part OB is exposed to light selectively; a latent image is formed. The complex MCP is developed and silver is precipitated selectively in the optical black part OB. In order to secure the light-shielding performance of a light- shielding film SF, the silver is precipitated with a film thickness of about 1 µm. The complex MCP is



fixed; the complex MCP in an unexposed part is removed; the light- shielding film SF composed of silver is formed.

## **LEGAL STATUS**

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